

### REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the present amendment and following discussion, is respectfully requested.

Claims 13-21, 23-25, 28, 29, and 32-36 are pending. Claims 30 and 31 are canceled by the present amendment. Claims 13, 23, 25, 28, and 33 are amended. Claims 35-36 are added by the present amendment. Claim 13 is amended to recite a feature previously recited in Claim 25. Claim 25 is amended to omit the feature now placed in Claim 13. Claim 23 is amended the same way as Claim 13 and support can be found in previous Claim 25, for example. Claim 28 is amended to recite the features of Claims 30 and 31. Accordingly, the present amendment cancels Claims 30 and 31. Claim 33 is amended to address an informality, and support for this amendment is self-evident. Support for newly added Claims 35-36 can be found in Fig. 1, for example. No new matter is added. Claims 1-12, 22, 26, and 27 were canceled previously. Claim 23 is withdrawn.

In the outstanding Office Action, Claims 13, 14, 17, 19, 24, 25, and 28-34 were rejected under 35 U.S.C. § 102(b) as anticipated by Smith et al. (U.S. Patent No. 5,133,504, herein "Smith"). Claim 15 (and apparently, Claim 16) were rejected under 35 U.S.C. § 103(a) as obvious over Smith in view of Ohnishi (Japanese Patent No. 2000-140675, herein "JP '675").<sup>1</sup> Claims 18, 20, and 21 were rejected under 35 U.S.C. § 103(a) as obvious over Smith in view of Ohnishi et al. (U.S. Patent No. 5,934,575, herein "Ohnishi").

Regarding the rejection of **Claim 13** as anticipated by Smith, that rejection is respectfully traversed by the present response.

Claim 13 is amended to recite, in part:

wherein the axis of the cylindrical member is disposed horizontally with respect to gravity.

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<sup>1</sup> Page 4 of the outstanding Office Action rejects Claim 16 under 35 U.S.C. § 103(a) as obvious over Ohnishi, but Claim 16 depends from Claim 13, which was rejected as anticipated by Smith. Accordingly, Applicants understand that Smith must be cited in the rejection of dependent Claim 16.

Thus, the axis of the cylindrical member is horizontal.

One benefit of the above-noted arrangement is that fewer particles deposit on top of the cylindrical member.

In contrast, the axis of the cylindrical target (113) in Smith is vertical with respect to gravity. Thus, Smith fails to disclose “an axis of the cylindrical member is disposed at a non-zero angle relative to a longitudinal axis of the venturi nozzle ... wherein the axis of the cylindrical member is disposed horizontally with respect to gravity” as recited in amended independent Claim 13.

Additionally, Applicants respectfully submit that a person of ordinary skill in the art would not have had any apparent reason, at the time the process recited in Claim 13 was made, to modify Ohnishi to orient the cylindrical target (113) such that the axis of the cylindrical target (113) would be horizontal. Rather, Smith is directed to enhancement of a fluidized bed jet mill. Thus, in order to cause rejected particles to flow along the peripheral wall (3) of the grinding chamber down to the fluidized bed, where they are recirculated, the mill must include the vertical orientation depicted in Fig. 4A of Smith. Therefore, in this arrangement, the nozzles will be directed horizontally to blow onto the cylindrical target (113) **from all sides**. Accordingly, the axis of the cylinder of the cylindrical target (113) will be oriented vertically in order to achieve Smith's intended use. Orienting the axis of the cylindrical target (113) horizontally would render Smith unsuitable for its intended use. Therefore, not only does Smith fail to teach all of the features recited in amended independent Claim 13, Smith teaches away from modification to include these features. Therefore, amended independent Claim 13 and all of the claims depending therefrom patentably distinguish over Smith.

Amended independent **Claim 28** recites that the cross-sectional area of the curved side facing toward an inlet of the venturi nozzle is constant (taken along a direction

perpendicular to the direction of travel of the resin composition). The above-noted direction perpendicular to the direction of travel of the resin composition is **horizontal**.

As discussed above regarding amended independent Claim 13, the axis of the cylindrical target (113) of Smith is vertical. Along this vertical axis, the cylindrical target (113) has a constant cross section. However, in a horizontal direction, the cylindrical target (113) of Smith does not have a constant cross section. Therefore, Smith fails to disclose all of the features recited in amended independent Claim 28. Additionally, as discussed above regarding the horizontal axis of Claim 13, a person of ordinary skill in the art would not re-orient the cylindrical member described in Smith inasmuch as to do so would render Smith unsuitable for its intended use. Thus, Smith teaches away from the features of Claim 28, and amended independent Claim 28 and the claims depending therefrom patentably distinguish over Smith for at least the reasons discussed above.

Neither of JP '675 nor Ohnishi remedies the deficiencies in Smith discussed above. Rather, none of these references discloses an axis of the cylindrical member parallel to an impact side facing toward an inlet of the venturi nozzle, the axis being horizontal with respect to gravity. Rather, any axis parallel to an impact side in either of these references is not both horizontal with respect to gravity and disposed at a non-zero angle relative to a longitudinal axis of a venturi nozzle. Accordingly, amended independent Claim 13 and the claims depending therefrom patentably distinguish over any reasonable combination of the cited references.

Additionally, JP '675 and Ohnishi fail to remedy the deficiencies discussed above regarding Smith in relation to amended independent Claim 28. Therefore, amended independent Claim 28 and the claims depending therefrom patentably distinguish over any proper combination of Smith, JP '675, and Ohnishi.

Applicants wish to thank the following comments regarding newly added dependent

**Claims 35 and 36.** Newly added dependent Claim 35 recites:

The process according to claim 13, wherein the venturi nozzle is the only nozzle the impact side faces.

Thus, the impact side faces only one nozzle, the venturi nozzle.

In contrast, Smith requires **multiple nozzles** directing particles toward its impact member. Accordingly, Smith fails to disclose all the features recited in newly added dependent Claims 35 and 36.

Additionally, a person of ordinary skill in the art would not have had any apparent reason to modify Smith to provide only a single nozzle. Rather, Smith derives a specific benefit of providing multiple nozzles, and a person of ordinary skill in the art would not have found it obvious at the time the claimed invention was made to limit Smith to a single nozzle. For example, the fluidized bed jet mill of Smith relates to a size reduction machine to grind particles sprayed through nozzles into a grinding chamber by their impact against each other or against a stationary surface in the grinding chamber (see column 1, lines 6–11 in Smith). In Smith, an impact plate (an impact target) is arranged at the central axis of the fluidized bed jet mill so that the particles impinge upon the surface of the target and are fractured upon impact, and accelerated particles may also be fractured by striking other particles within the grinding zone, thereby improving pulverization efficiency. Accordingly, in Smith, the particles are pulverized by impacts of the particles with each other and of impacts of the particles with the stationary surface in addition to impacts of the particles with the impact plate.

Thus, the technique in Smith and other conventional techniques have been developed and designed for the purpose of carrying out a **multi-step pulverization** including a primary pulverization with an impact plate, and a further secondary pulverization with a wall surface.

In such a configuration, fine powder is likely to be generated, thereby making the production efficiency poor.

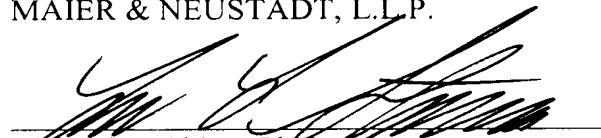
In contrast, the processes recited in Claims 35 and 36 provide a pulverization process of which the main process is a primary pulverization with an impact plate, and production efficiency is relatively high (see [0011] and [0056] in U.S. 2008/283638). In other words, the processes recited in newly added dependent Claims 35 and 36 prevent or reduce turbulent flow, and the impacts of the particles with each other and of the particles with the stationary surface. One benefit of this arrangement is that generation of fine powder is better suppressed.

For the foregoing reasons, it is respectfully submitted that this application is now in condition for allowance. A Notice of Allowance for Claims 13-21, 23-25, 28, 29, and 32-36 is earnestly solicited.

Should Examiner Francis deem that any further action is necessary to place this application in even better form for allowance, she is encouraged to contact Applicants' undersigned representative at the below-listed telephone number.

Respectfully submitted,

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